

Notice of Allowability

Application No.

09/833,573

Examiner

Ashok B. Patel

Applicant(s)

FLEMING, ROGER A.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/13/2006.
2. ☒ The allowed claim(s) is/are 1-5, 7-17, 19 and 20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

JOHN FOLLANSBEE
SUPERVISORY EXAMINER
TECHNOLOGICAL CENTER 2100

DETAILED ACTION

1. Claims 1-5, 7-17, 19 and 20 are allowed. Claims 6 and 18 are cancelled.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Phillip Articola on 05/16/2006.

3. The application has been amended as follows:

In the claims:

- a. Claims 6 and 18 are cancelled.
- b. Claim 1. (Currently Amended) A method of performing one or more of adding and removing a process in a distributed system having a plurality of processes currently operational therein, said method comprising steps of:
 - (1) launching a probationary member in said distributed system;
 - (2) establishing a plurality of communication paths between said probationary member and each of said plurality of processes, respectively, in said system;
 - (3) evaluating at least one criterion for promoting said probationary member to a full member, based on information obtained from said probationary member by said each of said plurality of processes on said plurality of communication paths; and

(4) ~~performing one of promoting said probationary member to a full member and eliminating said probationary member based on the evaluation performed in step (3),~~ replacing a first process in said system and promoting said probationary member to a full member in a single view change in which all processes in said system are notified of said first process being replaced and said probationary member being promoted,

wherein at least two of said plurality of processes are performed on separate processors that communicate with each other over a computer network.

c. Claim 3. (Currently Amended) The method of claim 2, wherein said step (4) further comprises steps step of:

promoting said probationary member to said full member in response to said at least

one criterion being satisfied; and

~~eliminating said probationary member in response to said at least one criterion not being satisfied.~~

d. Claim 7, line 1, replace "6" with -- 1--.

e. Claim 9. (Currently Amended) A distributed system including a plurality of processes in communication with each other, said distributed system comprising:

a first host capable of executing a first process of said plurality of processes;

a second host capable of executing a second process of said plurality of processes;

a third host capable of executing a third process of said plurality of processes;

a first communication path connecting said first and second hosts, a second

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communication path connecting said first and third hosts, and a third communication path connecting said second and third hosts; wherein

said second process is a probationary member evaluated using at least one criterion for promoting said probationary member to a full member; and

said probationary member being either promoted to a full member or eliminated in a single view change in which all processes in said system are notified of said probationary member being promoted and a first process in said system being replaced, based on the evaluation using said at least one criterion for promoting said probationary member to a full member, said at least one criterion being obtained based on information output by said second host that is received on said first and third communication paths by said first and third hosts,

wherein at least two of said plurality of processes are performed on separate processors that communicate with each other over a computer network.

f. Claim 10. (Currently Amended) The distributed system of claim 9, wherein said system is operable to promote said probationary member to said full member in response to said at least one criterion being satisfied; and

~~said system is operable to eliminate said probationary member in response to said at least one criterion not being satisfied.~~

g. Claim 13. (Currently Amended) A computer readable medium on which is embedded a program, the program executing a method for performing one or more of adding and removing a process in a distributed system having a plurality of processes currently operational therein, said method comprising steps of

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- (1) launching a probationary member in said distributed system;
- (2) establishing a plurality of communication paths between said probationary member and each of said plurality of processes currently operational in said distributed system;
- (3) evaluating at least one criterion for promoting said probationary member to a full member, based on information obtained from said probationary member by each of said plurality of processes currently operational, respectively, by way of said plurality of communication paths; and
- (4) ~~performing one of~~ promoting said probationary member to a full member and ~~eliminating said probationary member~~ replacing a first process in said system in a single view change in which all processes in said system are notified of said first process being replaced and said probationary member being promoted, based on the evaluation performed in step (3),

wherein at least two of said plurality of processes are performed on separate processors that communicate with each other over a computer network.

h. Claim 15. (Currently Amended) The computer readable medium of claim 14, wherein said step (4) in said method further comprises steps of:

promoting said probationary member to said 111 member in response to said at least one criterion being satisfied; and

~~eliminating said probationary member in response to said at least one criterion not being satisfied.~~

i. Claim 19, line 1, replace "18" with -- 13--.

REASONS FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance:

None of the prior arts of record teach or suggest evaluating at least one criterion for promoting probationary member process to a full member process based on information obtained from the probationary member process by each of plurality of processes on plurality of communication paths and based on the evaluation performed, replacing a member process in the system and promoting the probationary member process to a full member process in a single view change in which all processes in the system are notified of the member process being replaced and probationary member process being promoted, wherein at least two of plurality of processes are performed on separate processors that communicate with each other over a computer network along with other claim limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok B. Patel whose telephone number is (571) 272-3972. The examiner can normally be reached on 8:00am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abp


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